

CLAIMS

1. A method of effecting a reduction of energy usage in a room of a multi-unit building, comprising:

determining a vacant occupancy status of the room;

generating digital commands in response to the vacant occupancy status of the room;

converting the digital commands at a gateway device located inside of the room into infrared commands;

transmitting the infrared commands from the gateway device;

receiving the infrared commands at a room environment control device located inside of the room; and

converting the infrared commands into electronic commands which are processed by the room environmental control device to effect a reduction of energy usage by a room environmental device associated with the room environmental control device.

2. The method of claim 1 wherein the vacant occupancy status comprises an un-rented room.

3. The method of claim 1 wherein the vacant occupancy status comprises a rented room that is un-occupied.

4. The method of claim 1 wherein the determining the vacant occupancy status comprises tracking actuation of a door switch associated with a door of the room.

5. The method of claim 1 wherein the determining the vacant occupancy status comprises detecting motion within the room.

6. The method of claim 1 further comprising:

receiving the infrared commands at a window treatment control device within the room; and

converting the infrared commands into electronic commands which are processed by the window treatment control device to set the window treatment to effect a reduction of energy usage by the room environmental device.

7. The method of claim 1 wherein the gateway device is associated with at least one of a light switch, a mini-bar, a telephone, a door lock, and a television set top box.

8. The method of claim 1 wherein the gateway device is connected to a network of the multi-unit building and the digital commands are provided by the network.

9. The method of claim 1 wherein the room environmental control device comprises a thermostat.

10. The method of claim 1 wherein the room environmental device comprises one of a Fan Coil Unit, a Heating Ventilation and Air Conditioning system, a Packaged Terminal Air Conditioner, and an Energy Management System.

11. The method of claim 1 wherein the infrared commands are diffused infrared dispersion.

12. A system for effecting a reduction of energy usage in a room of a multi-unit building, comprising:

means for determining a vacant occupancy status of the room to generate digital commands in response thereto;

a gateway device located inside of the room for converting the digital commands into infrared commands and transmitting the infrared commands within the room; and

a room environment control device located inside of the room, the room environment control device including means for receiving the infrared commands and converting the infrared commands into electronic commands which are processed to effect a reduction of energy usage by a room environmental device associated with the room environmental control device.

13. The system of claim 12 wherein the vacant occupancy status comprises an un-rented room.

14. The system of claim 12 wherein the vacant occupancy status comprises a rented room that is un-occupied.

15. The system of claim 12 wherein the means for determining the vacant occupancy status comprises a door switch associated with a door of the room.

16. The system of claim 12 wherein the means for determining the vacant occupancy status comprises a motion detector located inside of the room.

17. The system of claim 12 further comprising:

a window treatment control device located inside of the room, the window treatment control device including means for receiving the infrared commands and converting the infrared commands into electronic commands which are processed to set a window treatment to effect a reduction of energy usage by the room environmental device.

18. The system of claim 12 wherein the gateway device is associated with at least one of a light switch, a mini-bar, a telephone, a door lock, and a television set top box.

19. The system of claim 12 wherein the gateway device is connected to a network of the multi-unit building and the digital commands are provided by the network.

20. The system of claim 12 wherein the room environmental control device comprises a thermostat.

21. The system of claim 12 wherein the room environmental device comprises one of a Fan Coil Unit, a Heating Ventilation and Air Conditioning system, a Packaged Terminal Air Conditioner, and an Energy Management System.

22. The system of claim 12 wherein the infrared commands are diffused infrared dispersion.

23. A method of profiling an occupant's desired environmental settings in a room of a multi-unit building, comprising:

converting electronic data indicative of a setting on a room environmental control device located inside of the room into infrared data;

transmitting the infrared data from the room environmental control device;

receiving the infrared data at a gateway device located inside of the room; and

converting the infrared data into digital data which is processed to generate a profile of the occupant's desired environmental settings.

24. The method of claim 23 wherein the gateway device is associated with at least one of a light switch, a mini-bar, a telephone, a door lock, and a television set top box.

25. The method of claim 23 wherein the gateway device is connected to a network of the multi-unit building and the digital data is provided to the network.

26. The method of claim 23 wherein the room environmental control device comprises a thermostat.

27. The method of claim 23 wherein the room environmental device comprises one of a Fan Coil Unit, a Heating Ventilation and Air Conditioning system, a Packaged Terminal Air Conditioner, and an Energy Management System.

28. The method of claim 23 wherein the infrared data is diffused infrared dispersion.

29. A system for profiling an occupant's desired environmental settings in a room of a multi-unit building, comprising:

a room environment control device located inside of the room, the room environment control device including means for converting electronic data indicative of a setting on a room environmental control device located inside of the room into infrared data and transmitting the infrared data from the room environmental control device;

a gateway device located inside of the room for receiving the infrared data at a gateway device located inside of the room and converting the infrared data into digital data; and

means for processing the digital data to generate a profile of the occupant's desired environmental settings.

30. The system of claim 29 wherein the gateway device is associated with at least one of a light switch, a mini-bar, a telephone, a door lock, and a television set top box.

31. The system of claim 29 wherein the gateway device is connected to a network of the multi-unit building and the digital data is provided to the network.

32. The system of claim 29 wherein the room environmental control device comprises a thermostat.

33. The system of claim 29 wherein the room environmental device comprises one of a Fan Coil Unit, a Heating Ventilation and Air Conditioning system, a Packaged Terminal Air Conditioner, and an Energy Management System

34. The system of claim 29 wherein the infrared data is diffused infrared dispersion.

35. A method of determining a condition of a mini-bar condition in a room of a multi-unit building, comprising:

detecting an activity at the mini-bar located inside of the room;

generating electronic data in response to the activity at the mini-bar;

converting the electronic data at the mini-bar into infrared data;

transmitting the infrared data from the mini-bar;

receiving the infrared data at a gateway device located inside of the room; and

converting the infrared data into digital data which is processed to determine the condition of the mini-bar.

36. The method of claim 35 further comprising indicating outside the room the condition of the mini-bar.

37. The method of claim 36 wherein the indicating comprises discretely indicating upon activation of discrete switch.

38. The method of claim 35 wherein the activity includes at least one of (1) an opening of an access door of the mini-bar and (2) a removal of an item in the mini-bar.

39. The method of claim 35 wherein the condition comprises service required for the mini-bar.

40. The method of claim 35 wherein the gateway device is associated with at least one of a light switch, a thermostat, a telephone, a door lock, and a television set top box.

41. The method of claim 35 wherein the gateway device is connected to a network of the multi-unit building and the digital data is provided to the network.

42. The method of claim 35 wherein the infrared data is diffused infrared dispersion.

43. A system for determining a condition of a mini-bar condition in a room of a multi-unit building, comprising:

means for detecting an activity at the mini-bar located inside of the room to generate electronic data in response to the activity at the mini-bar;

means for converting the electronic data at the mini-bar into infrared data and transmitting the infrared data from the mini-bar; and

a gateway device located inside of the room for receiving the infrared data and converting the infrared data into digital data which is processed to determine the condition of the mini-bar.

44. The system of claim 43 further comprising means for indicating outside the room the condition of the mini-bar.

45. The system of claim 44 wherein the means for indicating comprises means for discretely indicating upon activation of discrete switch.

46. The system of claim 43 wherein the activity includes at least one of (1) an opening of an access door of the mini-bar and (2) a removal of an item in the mini-bar.

47. The system of claim 43 wherein the condition comprises service required for the mini-bar.

48. The system of claim 43 wherein the gateway device is associated with at least one of a light switch, a thermostat, a telephone, a door lock, and a television set top box.

49. The system of claim 43 wherein the gateway device is connected to a network of the multi-unit building and the digital data is provided to the network.

50. The system of claim 43 wherein the infrared data is diffused infrared dispersion.

51. A method of detecting a request of an occupant in a room of a multi-unit building, comprising:

converting the request of the occupant from an occupant interface device located inside of the room into infrared data;

transmitting the infrared data from the occupant interface device;

receiving the infrared data at a gateway device located inside of the room; and

converting the infrared data into digital data which is processed to generate the request of the occupant for detection outside of the room.

52. The method of claim 51 wherein the converting the infrared data comprises converting the infrared data into the digital data which is processed to generate the request of the occupant for detection outside of the room by a staff of the multi-unit building.

53. The method of claim 51 wherein said request comprises at least one of a make-up-room request, a do-not-disturb request, and a butler call request.

54. The method of claim 51 wherein the gateway device is associated with at least one of a light switch, a thermostat, a telephone, a door lock, and a television set top box.

55. The method of claim 51 wherein the gateway device is connected to a network of the multi-unit building and the digital data is provided to the network.

56. The method of claim 51 wherein the infrared data is diffused infrared dispersion.

57. A system for detecting a request of an occupant in a room of a multi-unit building, comprising:

an interface device located inside of the room, the interface device including means for converting the request of the occupant into infrared data and transmitting the infrared data;

a gateway device located inside of the room for receiving the infrared data and converting the infrared data into digital data which is processed to generate the request of the occupant; and

means for detecting outside of the room by a staff of the multi-unit building the request of the occupant.

58. The system of claim 57 wherein the means for converting the infrared data comprises means for converting the infrared data into the digital data which is processed to generate the request of the occupant for detection outside of the room by a staff of the multi-unit building.

59. The system of claim 57 wherein said request comprises at least one of a make-up-room request, a do-not-disturb request, and a butler call request.

60. The system of claim 57 wherein the gateway device is associated with at least one of a light switch, a thermostat, a telephone, a door lock, and a television set top box.

61. The system of claim 57 wherein the gateway device is connected to a network of the multi-unit building and the digital data is provided to the network.

62. The system of claim 57 wherein the infrared data is diffused infrared dispersion.

63. A method of effecting a reduction of energy usage in a room of a multi-unit building, comprising:

determining a vacant occupancy status of a room;

generating digital commands in response to the vacant occupancy status of a room;

converting the digital commands at a gateway device located inside of the room into infrared commands;

transmitting the infrared commands from the gateway device;

receiving the infrared commands at a window treatment control device located inside of the room; and

converting the infrared commands into electronic commands which are processed by the window treatment control device to set the window treatment to effect a reduction of energy usage.

64. The method of claim 63 wherein the vacant occupancy status comprising an un-rented room.

65. The method of claim 63 wherein the vacant occupancy status comprising a rented room that is un-occupied.

66. The method of claim 63 wherein the determining the vacant occupancy status comprises tracking actuation of a door switch associated with a door of the room.

67. The method of claim 63 wherein the determining the vacant occupancy status comprises detecting motion within the room.

68. The method of claim 63 wherein the gateway device is associated with at least one of a light switch, a thermostat, a mini-bar, a telephone, a door lock, and a television set top box.

69. The method of claim 63 wherein the gateway device is connected to a network of the multi-unit building and the digital commands are provided by the network.

70. The method of claim 63 wherein the infrared commands are diffused infrared dispersion.

71. A system for effecting a reduction of energy usage in a room of a multi-unit building, comprising:

means for determining a vacant occupancy status of a room to generate digital commands in response to the vacant occupancy status of a room;

a gateway device located inside of the room for converting the digital commands into infrared commands and transmitting the infrared commands within the room;

a window treatment control device located inside of the room, the window treatment control device including means for receiving the infrared commands and converting the infrared commands into electronic commands which are processed to set the window treatment to effect a reduction of energy usage.

72. The system of claim 70 wherein the vacant occupancy status comprising an un-rented room.

73. The system of claim 70 wherein the vacant occupancy status comprising a rented room that is un-occupied.

74. The system of claim 70 wherein the means for determining the vacant occupancy status comprises a door switch associated with a door of the room.

75. The system of claim 70 wherein the means for determining the vacant occupancy status comprises a motion detector located inside of the room.

76. The system of claim 70 wherein the gateway device is associated with at least one of a light switch, a thermostat, a mini-bar, a telephone, a door lock, and a television set top box.

77. The system of claim 70 wherein the gateway device is connected to a network of the multi-unit building and the digital commands are provided by the network.

78. The system of claim 70 wherein the infrared commands are diffused infrared dispersion.

79. A method of locating a staff within a multi-unit building, comprising:

transmitting infrared data from a staff tracking device indicative of an identity of the staff which the staff tracking device is associated with;

receiving the infrared data at a plate located outside of a room of the multi-unit building, the plate being associated with the room; and

converting the infrared data into digital data which is processed to determine a location of the staff within the multi-unit building.

80. The method of claim 79 wherein the plate comprises a doorbell button plate.

81. The method of claim 79 wherein the plate comprises a room number plate.

82. The method of claim 79 wherein the infrared data is diffused infrared dispersion.

83. A system for locating a staff within a multi-unit building, comprising:

means for transmitting infrared data from a staff tracking device indicative of an identity of the staff which the staff tracking device is associated with;

means for receiving the infrared data at a plate located outside of a room of the multi-unit building, the plate being associated with the room; and

means for converting the infrared data into digital data which is processed to determine a location of the staff within the multi-unit building.

84. The system of claim 83 wherein the plate comprises a doorbell button plate.

85. The system of claim 83 wherein the plate comprises a room number plate.

86. The system of claim 83 wherein the infrared data is diffused infrared dispersion.

87. A method of locating a staff within a multi-unit building, comprising:

transmitting infrared data from a staff tracking device indicative of an identity of the staff which the staff tracking device is associated with;

receiving the infrared data at a device located inside of a room of the multi-unit building, the device being associated with a convenience of the room; and

converting the infrared data into digital data which is processed to determine a location of the staff within the multi-unit building.

88. The method of claim 79 wherein the device comprises at least one of a light switch, a thermostat, a mini-bar, a telephone, a door lock, and a television set top box.

89. The method of claim 87 wherein the infrared data is diffused infrared dispersion.

90. A system for locating a staff within a multi-unit building, comprising:

means for transmitting infrared data from a staff tracking device indicative of an identity of the staff which the staff tracking device is associated with;

means for receiving the infrared data at a device located inside of a room of the multi-unit building, the device being associated with a convenience of the room; and

means for converting the infrared data into digital data which is processed to determine a location of the staff within the multi-unit building.

91. The system of claim 90 wherein the device comprises at least one of a light switch, a thermostat, a mini-bar, a telephone, a door lock, and a television set top box.

92. The system of claim 90 wherein the infrared data is diffused infrared dispersion.

93. A method of locating and sending a message to a staff within a multi-unit building, comprising:

transmitting infrared data from a staff communication device indicative of an identity of the staff which the staff tracking device is associated with;

receiving the infrared data within the multi-unit building;

converting the infrared data into digital data which is processed to determine a location of the staff within the multi-unit building;

transmitting an infrared message within the multi-unit building indicative of a message for the staff within the multi-unit building;

receiving the infrared message at the staff communication device;

converting the infrared data into electrical data; and

providing the message to the staff in a detectable format, in response to the electrical data.

94. The method of claim 93 wherein the detectable format is visual.

95. The method of claim 93 wherein the detectable format is audio.

96. The method of claim 93 wherein the transmitting the infrared message occurs inside of a room of the multi-unit building.

97. The method of claim 93 wherein the transmitting the infrared message occurs outside of a room in the multi-unit building.

98. The method of claim 93 wherein the receiving the infrared data occurs inside of a room of the multi-unit building.

99. The method of claim 93 wherein the receiving the infrared data occurs outside of a room in the multi-unit building.

100. The method of claim 93 wherein at least one of the infrared data and the infrared message is diffused infrared dispersion.

101. A system for locating and sending a message to a staff within a multi-unit building, comprising:

means for transmitting infrared data from a staff communication device indicative of an identity of the staff which the staff tracking device is associated with;

means for receiving the infrared data within the multi-unit building;

means for converting the infrared data into digital data which is processed to determine a location of the staff within the multi-unit building;

means for transmitting an infrared message within the multi-unit building indicative of a message for the staff within the multi-unit building;

means for receiving the infrared message at the staff communication device;

means for converting the infrared data into electrical data; and

means for providing the message to the staff in a detectable format, in response to the electrical data.

102. The system of claim 101 wherein the detectable format is visual.

103. The system of claim 101 wherein the detectable format is audio.

104. The system of claim 101 wherein the transmitting the infrared message occurs inside of a room of the multi-unit building.

105. The system of claim 101 wherein the transmitting the infrared message occurs outside of a room in the multi-unit building.

106. The system of claim 101 wherein the means for receiving the infrared data occurs inside of a room of the multi-unit building.

107. The system of claim 101 wherein the means for receiving the infrared data occurs outside of a room in the multi-unit building.

108. The system of claim 101 wherein at least one of the infrared data and the infrared message is diffused infrared dispersion.

109. A method of locating a service device within a multi-unit building, comprising:

transmitting infrared data from a service tracking device indicative of an identity of the service device which the staff tracking device is associated with;

receiving the infrared data at a plate located outside of a room of the multi-unit building, the plate being associated with the room; and

converting the infrared data into digital data which is processed to determine a location of the service device within the multi-unit building.

110. The method of claim 109 wherein the service device comprises one of a food service cart, a food service tray, a maid service cart, a shoe shine box, a mini-bar service cart, and a maintenance service cart.

111. The method of claim 109 wherein the plate comprises a doorbell button plate.

112. The method of claim 109 wherein the plate comprises a room number plate.

113. The method of claim 109 wherein the converting the infrared data includes interfacing through a gateway device associated with a room of the multi-unit building.

114. The method of claim 109 when the infrared data is diffused infrared dispersion.

115. A system for locating a service device within a multi-unit building, comprising:

means for transmitting infrared data from a service tracking device indicative of an identity of the service device which the staff tracking device is associated with;

means for receiving the infrared data at a plate located outside of a room of the multi-unit building, the plate being associated with the room; and

means for converting the infrared data into digital data which is processed to determine a location of the service device within the multi-unit building.

116. The system of claim 115 wherein the service device comprises one of a food service cart, a food service tray, a maid service cart, a shoe shine box, a mini-bar service cart, and a maintenance service cart.

117. The system of claim 115 wherein the plate comprises a doorbell button plate.

118. The system of claim 115 wherein the plate comprises a room number plate.

119. The system of claim 115 wherein the means for converting includes a gateway device associated with a room of the multi-unit building.

120. The system of claim 115 wherein the infrared data is diffused infrared dispersion.

121. A method of locating a service device within a multi-unit building, comprising:

transmitting infrared data from a service tracking device indicative of an identity of the service device which the staff tracking device is associated with;

receiving the infrared data at a device located inside of a room of the multi-unit building, the device being associated with a convenience of the room; and

converting the infrared data into digital data which is processed to determine a location of the service device within the multi-unit building.

122. The method of claim 121 wherein the service device comprises one of a food service cart, a food service tray, a maid service cart, a shoe shine box, a mini-bar service cart, and a maintenance service cart.

123. The method of claim 121 wherein the devices comprise at least one of a light switch, a thermostat, a mini-bar, a telephone, a door lock, and a television set top box.

124. The method of claim 121 wherein the converting the infrared data includes interfacing through a gateway device associated with a room of the multi-unit building.

125. The method of claim 121 when the infrared data is diffused infrared dispersion.

126. A system for locating a service device within a multi-unit building, comprising:

means for transmitting infrared data from a service tracking device indicative of an identity of the service device which the staff tracking device is associated with;

means for receiving the infrared data at a device located inside of a room of the multi-unit building, the device being associated with a convenience of the room; and

means for converting the infrared data into digital data which is processed to determine a location of the service device within the multi-unit building.

127. The system of claim 126 wherein the service device comprises one of a food service cart, a food service tray, a maid service cart, a shoe shine box, mini-bar service cart, and a maintenance service cart.

128. The system of claim 126 wherein the device comprises at least one of a light switch, a thermostat, a mini-bar, a telephone, a door lock, and a television set top box.

129. The system of claim 126 wherein the means for converting includes a gateway device associated with a room of the multi-unit building.

130. The system of claim 126 wherein the infrared data is diffused infrared dispersion.

131. A method of displaying a request to staff of a multi-unit building, comprising:

transmitting infrared data at gateway device within the room indicative of the request;

receiving the infrared data within the room;

converting the infrared data into electrical data; and

displaying the request to a staff outside the room, in response to the electrical data.

132. The method of claim 131 wherein the request comprises at least one of a make-up-room request and a request to report to a location within the multi-unit building.

133. The method of claim 131 wherein the gateway device is associated with at least one of a light switch, a thermostat, a mini-bar, a telephone, a door lock, and a television set top box.

134. The method of claim 131 wherein the gateway device is connected to a network of the multi-unit building.

135. The method of claim 131 wherein the infrared data is diffused infrared dispersion.

136. A system for displaying a request to staff of a multi-unit building, comprising:

means for transmitting infrared data at gateway device within the room indicative of the request;

means for receiving the infrared data within the room;

means for converting the infrared data into electrical data; and

means for displaying the request to a staff outside the room, in response to the electrical data.

137. The system of claim 136 wherein the request comprises at least one of a make-up-room request and a request to report to a location within the multi-unit building.

138. The system of claim 136 wherein the gateway device is associated with at least one of a light switch, a thermostat, a mini-bar, a telephone, a door lock, and a television set top box.

139. The system of claim 136 wherein the gateway device is connected to a network of the multi-unit building.

140. The system of claim 136 wherein the infrared data is diffused infrared dispersion.

141. A method of providing a message to an occupant in a room of a multi-unit building, comprising:

transmitting an infrared message from a gateway device located inside of the room, the infrared message indicative of the message to the occupant;

receiving the infrared message within the room;

converting the infrared message into an electrical message; and

providing the message to the occupant in the room in a detectable format, in response to the electrical message.

142. The method of claim 141 wherein the message comprises a doorbell.

143. The method of claim 141 wherein the detectable format is visual.

144. The method of claim 141 wherein the detectable format is audio.

145. The method of claim 141 the infrared message is diffused infrared dispersion.

146. The method of claim 141 wherein the gateway device is associated with at least one of a light switch, a thermostat, a mini-bar, a telephone, a door lock, and a television set top box.

147. The method of claim 141 wherein the gateway device is connected to a network of the multi-unit building.

148. A system for providing a message an occupant in a room of a multi-unit building, comprising:

a gateway device located inside of the room for transmitting an infrared message indicative of the message to the occupant;

means for receiving the infrared message within the room and converting the infrared message into an electrical message; and

means for providing the message to the occupant in the room in a detectable format, in response to the electrical message.

149. The system of claim 148 wherein the message comprises a doorbell.

150. The system of claim 148 wherein the detectable format is visual.

151. The system of claim 148 wherein the detectable format is audio.

152. The system of claim 148 the infrared message is diffused infrared dispersion.

153. The system of claim 148 wherein the gateway device is associated with at least one of a light switch, a thermostat, a mini-bar, a telephone, a door lock, and a television set top box.

154. The system of claim 148 wherein the gateway device is connected to a network of the multi-unit building.

155. A method of identifying a staff by an occupant in a room of a multi-unit building, comprising:

transmitting infrared data from a staff identification device indicative of an identity of the staff which the staff identification device is associated with;

receiving the infrared data; and

converting the infrared data into digital data which is processed to display within the room an identity of the staff.

156. The method of claim 155 wherein the receiving the infrared data occurs outside of the room.

157. The method of claim 155 wherein the receiving the infrared data occurs inside of the room.

158. The method of claim 155 wherein the converting the infrared data includes interfacing through a gateway device associated with a room of the multi-unit building.

159. The method of claim 155 when the infrared data is diffused infrared dispersion.

160. A system for identifying a staff by an occupant in a room of a multi-unit building, comprising:

means for transmitting infrared data from a staff identification device indicative of an identity of the staff which the staff identification device is associated with; and

means for receiving the infrared data and converting the infrared data into digital data which is processed to display within the room an identity of the staff.

161. The system of claim 160 wherein the means for receiving the infrared data is located outside of the room.

162. The system of claim 160 wherein the means for receiving the infrared data is located inside of the room.

163. The system of claim 160 wherein the converting the infrared data includes interfacing through a gateway device associated with a room of the multi-unit building.

164. The system of claim 160 when the infrared data is diffused infrared dispersion.

165. A method of effecting a reduction of energy usage in a room of a multi-unit building, comprising:

determining a vacant occupancy status of a room;

generating digital commands in response to the vacant occupancy status of a room;

converting the digital commands at a gateway device located inside of the room into infrared commands;

transmitting the infrared commands from the gateway device;

receiving the infrared commands at a light switch located inside of the room; and

converting the infrared commands into electronic commands which are processed to turn the light switch off.

166. The method of claim 165 wherein the vacant occupancy status comprising an un-rented room.

167. The method of claim 165 wherein the vacant occupancy status comprising a rented room that is un-occupied.

168. The method of claim 165 wherein the determining the vacant occupancy status comprises tracking actuation of a door switch associated with a door of the room.

169. The method of claim 165 wherein the determining the vacant occupancy status comprises detecting motion within the room.

170. The method of claim 165 wherein the gateway device is associated with at least one of the light switch, a thermostat, a mini-bar, a telephone, a door lock, and a television set top box.

171. The method of claim 165 wherein the gateway device is connected to a network of the multi-unit building and the digital commands are provided by the network.

172. The method of claim 165 wherein the infrared commands are diffused infrared dispersion.

173. A system for effecting a reduction of energy usage in a room of a multi-unit building, comprising:

means for determining a vacant occupancy status of a room to generate digital commands in response to the vacant occupancy status of a room;

a gateway device located inside of the room for converting the digital commands into infrared commands and transmitting the infrared commands within the room;

a light switch located inside of the room, the light switch including means for receiving the infrared commands and converting the infrared commands into electronic commands which are processed to turn the light switch off.

174. The system of claim 173 wherein the vacant occupancy status comprising an un-rented room.

175. The system of claim 173 wherein the vacant occupancy status comprising a rented room that is un-occupied.

176. The system of claim 173 wherein the means for determining the vacant occupancy status comprises a door switch associated with a door of the room.

177. The system of claim 173 wherein the means for determining the vacant occupancy status comprises a motion detector located inside of the room.

178. The system of claim 173 wherein the gateway device is associated with at least one of the light switch, a thermostat, a mini-bar, a telephone, a door lock, and a television set top box.

179. The system of claim 173 wherein the gateway device is connected to a network of the multi-unit building and the digital commands are provided by the network.

180. The system of claim 173 wherein the infrared commands are diffused infrared dispersion.

181. A method for affecting a state of a door lock device associated with a room of a multi-unit building, comprising:

generating digital commands in response to a determination to affect the state of the door lock device;

converting the digital commands at a gateway device located inside of the room into infrared commands;

transmitting the infrared commands from the gateway device;

receiving the infrared commands at the door lock device; and

converting the infrared commands into electronic commands which are processed by the door lock device to affect the state of the door lock device.

182. The method of claim 181 wherein the state of the door lock device comprises at least one of lock, unlock, and set at least one lock access code.

183. The method of claim 181 wherein the gateway device is associated with at least one of a light switch, a thermostat, mini-bar, a telephone, and a television set top box.

184. The method of claim 181 wherein the gateway device is connected to a network of the multi-unit building and the digital commands are provided by the network.

185. The method of claim 181 wherein the infrared commands are diffused infrared dispersion.

186. A system for affecting a state of a door lock device associated with building, comprising:

a gateway device located inside of the room for converting digital commands into infrared commands and transmitting the infrared commands within the room, the digital commands generated in response to a determination to affect the state of the door lock device; and

the door lock device including means for receiving the infrared commands and converting the infrared commands into electronic commands which are processed to affect the state of the door lock device.

187. The system of claim 186 wherein state of the door lock device comprises at least one of lock, unlock, and set lock code.

188. The system of claim 186 wherein the gateway device is associated with at least one of a light switch, a thermostat, a mini-bar, a telephone and a television set top box.

189. The system of claim 186 wherein the gateway device is connected to a network of the multi-unit building and the digital commands are provided by the network.

190. The system of claim 186 wherein the infrared commands are diffused infrared dispersion.